

MEGOHMMETER 4449

1. GENERAL. This procurement requires a portable, precision, self-contained megohmmeter to measure and directly indicate resistance.
2. CLASSIFICATION. The equipment shall meet the requirements of MIL-PRF-28800F, class 3, for Navy shipboard, submarine and shore applications, except the operating altitude requirement is limited to 1,829 m (6000 ft.).
 - 2.1 Supplemental identification plate: A supplemental identification plate is required and shall indicate the following:
 - a. Manufacturers name and/or cage
 - b. Part or model number
 - c. Serial number
 - d. National stock number
 - e. Contract number
 - f. "Part of" or "P/O" military nomenclature
3. OPERATIONAL REQUIREMENTS. The equipment shall be capable of providing output voltages and resistance measurements within the minimum ranges, accuracy, and sensitivities specified below.
 - 3.1 Test Voltages: Range of output test voltage is 0 to ≥ 1 kvolts DC. The accuracy of the test voltages shall vary by no more than $\pm 3\%$.
 - 3.2 Short Circuit Current:

Test Voltage	Current
< 500 volts	5 mA
> 500 volts to < 1 kilovolts	25 mA
 - 3.3 VOLTAGE WARNING INDICATOR: There shall be a front panel indicator warning when voltage is present at the equipment terminals.
 - 3.4 Resistance Range: 1 megohms to 100 teraohms.
 - 3.5 Resistance Accuracy:
1 megohms to 1 teraohms: $\pm 1\%$ of reading
1 teraohms to 10 teraohms: $\pm 2\%$ of reading
10 teraohms to 100 teraohms: $\pm 10\%$ of reading.
 - 3.6 Indicating Meter: The meter may be analog or digital. If analog, the scale length should be a minimum of 76.2 mm (3 in). If digital, the display should be at least 3.5 digit with 0.5-inch character height.

4. GENERAL REQUIREMENTS.

- 4.1 Power Source: MIL-PRF-28800F normal power source requirements are invoked. Operation at 400 Hz not required. Maximum power consumed is 13 watts.
- 4.2 Weight: 10 kg (22 lbs.) maximum.
- 4.3 Lithium Batteries: Per MIL-PRF-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.
- 4.4 Accessories: Shielded test leads compatible with the equipment input terminals shall be provided. All necessary instruction manuals shall also be provided. These accessories shall be provided with their own carrying case. A plastic laminated accessory inventory list shall be provided and shall be attached to the case in such a manner as to minimize the potential for its physical damage. The case shall be marked in accordance with the reusable pouch or container requirements of MIL-PRF-28800F.
- 4.5 Technical manual: A technical manual shall be provided in both printed and electronic formats. The printed format shall be otherwise normally provided. The electronic format shall consist of the installation programs for the latest version of Adobe Acrobat for all computer platforms for which Acrobat is available and the technical manual in an electronic form that is readable through use of the Adobe Acrobat application.
- 4.6 Optional Transit Case: The Megohmmeter shall be supplied with a hard transit case as a line item option. The hard transit case shall comply with the specification in the MIL-PRF-28800F standard.